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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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08/766,607

12/13/1996

JEFFREY JACOBSEN

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7687

21005

7590

09/01/2006

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EXAMINER

PIZIALI, JEFFREY J

ART UNIT

PAPER NUMBER

2629

DATE MAILED: 09/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

08/766,607

Applicant(s)

JACOBSEN ET AL.

Examiner

Jeff Piziali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 and 27-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 and 27-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 December 1996 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed (on 19 June 2006) in this application after final rejection (mailed 17 February 2006). Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicants' '*Amendment*' filed on 19 June 2006 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-25 and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wilska et al. (United Kingdom - 2,289,555) in view of Takahara et al. (US 5,436,635).

In regards to claim 1, Wilska discloses a docking system for a portable wireless telephone [Fig. 3; 17], the portable wireless telephone including a microphone [Fig. 1; 20], a speaker [Fig. 1; 19], and transceiver [Fig. 1; 18] circuitry with an external communication interface [Fig. 3; 16] within a telephone housing [Fig. 3; 17], the docking system comprising: a display housing [Fig. 2; 1] (see Page 5, Paragraph 3) having a plurality of control elements [Fig. 3; 10, 11] (see

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Page 4, Paragraph 3) and a display circuit [Fig. 3; 6], the display housing including a connection interface [Fig. 3; 8] that couples with an external communication interface [Fig. 3; 16] of a handheld wireless telephone [Fig. 3; 17], such that image data received by the handheld wireless telephone is transmitted to the display circuit (see Page 5, Paragraph 3) and a liquid crystal display [Fig. 1; 9] mounted to the display housing and connected to the display circuit, the display circuit generating display data presented on the liquid crystal display as an image (see Page 4, Paragraph 2). Wilska does not expressly disclose an active matrix LCD, a light source, an image lens, or a power management circuit.

However, Takahara discloses an active matrix liquid crystal display (see Column 33, Lines 22-28), a light source [Fig. 21, 211] positioned in a display housing [Fig. 21, 201] to illuminate the image [Fig. 21, 214], a lens [Fig. 21, 216] in the display housing positioned to receive the image presented on the LCD for viewing by a user (see Column 28, Lines 30-49), and a power management circuit [Fig. 22, 223] that controls the power consumption of a display circuit [Fig. 22, the combined circuitry of 211, 214 & 221-225 and the 'variable resistor'], wherein after the image is illuminated, the power management circuit lowers the power consumption of the display circuit until new display data [Fig. 22, 'Video Signal'] is ready to be presented on the liquid crystal display, the power management circuit arranged for receiving control signals [i.e. pulse width variable signals from the 'variable resistor'] for lowering the power consumption, the control signals resulting from signals from the display circuit (see Column 31, Lines 16-63).

Wilska and Takahara are analogous art because they are from the shared field of handheld liquid crystal display devices. Thus, it would have been obvious to a person of

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ordinary skill in the art, at the time of the invention, to utilize Takahara's active matrix LCD, light source, lens assembly, and power management circuit with Wilska's communication device, so as to provide a high quality, energy efficient liquid crystal image that's easy to see (and read) in both dark and bright light.

In regards to claim 2, Wilska discloses at least a 320 x 240 pixel array (see Page 4, Paragraph 2). In the event that it is shown that the reference does not disclose the claimed pixel resolution with sufficient specificity, it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the number of pixels to provide properties such as a precise display image resolution of at least 320 x 240 pixel electrodes, and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

In regards to claim 3, Wilska does not expressly disclose at least a 640 x 480 pixel array. However, Wilska does disclose providing a resolution greater than 640 x 200 pixels² (see Page 4, Paragraph 2). In the event that it is shown that the reference does not disclose the claimed pixel range with sufficient specificity, it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the number of pixels to provide properties such as a precise display image resolution of at least 640 x 480 pixel electrodes, and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

In regards to claim 4, Wilska does not expressly disclose a transistor circuit array formed with single crystal silicon bonded to an optically transmissive substrate. However, Takahara discloses a transistor circuit array [Fig. 18A, 163] formed with single crystal silicon [Fig. 18A, 167c] bonded to an optically transmissive substrate [Fig. 18A, 162] with an adhesive layer [Fig. 18A, 167 a & 167b] (see Column 24, Line 44 - Column 25, Line 59). Therefore, it would have been obvious to an artisan at the time of invention to use Takahara's transistor circuit array as Wilska's LCD, so as to reduce extraneous light reflectance.

In regards to claim 5, Wilska discloses a transmitter (see Figures 1-2; Page 5, Paragraph 3).

In regards to claim 6, Wilska discloses the display housing has a volume less than 1000 cm³ (see Page 3, Paragraph 8).

In regards to claim 7, this claim is rejected by the reasoning applied in the above rejection of claim 1; furthermore, Wilska discloses a docking system [Fig. 3; 17] for a portable handheld wireless telephone [Fig. 3; 17], the portable wireless telephone [Fig. 3; 17] including a microphone [Fig. 1; 20], a speaker [Fig. 1; 19], and transceiver [Fig. 1; 18] circuitry with an external communication interface [Fig. 3; 16] within a telephone housing [Fig. 3; 17], the docking system comprising: a handheld housing [Fig. 2; 1] having a plurality of control elements [Fig. 2; 10, 11] and a display circuit [Fig. 3; 6], the handheld housing including a connection interface [Fig. 3; 8] that couples with an external communication interface [Fig. 3;

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16] of a handheld wireless telephone [Fig. 3; 17] (see Page 4, Paragraph 3 and Page 5, Paragraph 3); a display subhousing [Fig. 2; 9] carried by the handheld housing and moveable between a storage and operating position (see Figures 7-9), and a liquid crystal display [Fig. 1; 9] (see Page 4, Paragraph 2). Wilska does not expressly disclose an active matrix LCD, an LED light source, a magnifying image lens, or a power management circuit.

However, Takahara discloses an active matrix liquid crystal display (see Column 33, Lines 22-28), an LED light source [Fig. 21, 211] (see Column 30, Lines 1-18) positioned in a display subhousing [Fig. 21, 201] to illuminate the image [Fig. 21, 214], a lens [Fig. 21, 216] in the display subhousing that is positioned to magnify the image presented on the LCD (see Column 28, Lines 30-49), and a power management circuit [Fig. 22, 223] that controls the power consumption of a display circuit [Fig. 22, the combined circuitry of 211, 214 & 221-225 and the 'variable resistor'], wherein after the image is illuminated, the power management circuit lowers the power consumption of the display circuit until new display data [Fig. 22, 'Video Signal'] is ready to be presented on the liquid crystal display, the power management circuit arranged for receiving control signals [i.e. pulse width variable signals from the 'variable resistor'] for lowering the power consumption, the control signals resulting from signals from the display circuit (see Column 31, Lines 16-63).

Thus, it would have been obvious to a person of ordinary skill in the art, at the time of the invention, to utilize Takahara's active matrix LCD, LED light source, magnifying lens assembly, and power management circuit with Wilska's communication device, so as to provide a high quality, energy efficient liquid crystal image that's easy to see (and read) in both dark and bright light.

In regards to claim 8, Wilska does not expressly disclose a timing circuit. However, Takahara discloses a timing circuit (see Column 6, Line 52 - Column 7, Line 12). Therefore, it would have been obvious to an artisan at the time of invention to use Takahara's timing circuit with Wilska's LCD so as to regulate driving-signal flow to the display.

In regards to claim 9, Wilska discloses a battery [Fig. 3; 3].

In regards to claim 10, Wilska discloses a cradle [Fig. 2; 16] (see Page 5, Paragraph 2). For the purpose of securing the telephone to the communication device, it would have been obvious to an artisan at the time of invention to utilize Wilska's cradle to connect a telephone and to obtain the invention as specified in claim 10.

In regards to claim 11, Wilska discloses a connector [Fig. 3; 8] adapted to be received by the external communication interface in the handheld wireless telephone [Fig. 3; 17], further comprising a latch [Fig. 3; 16]. For the purpose of securing the telephone to the communication device, it would have been obvious to an artisan at the time of invention to utilize Wilska's latch to connect a telephone and to obtain the invention as specified in claim 11.

In regards to claim 12, Wilska discloses a hidden lens in the storage position and a viewable lens in the operating position (see Figures 7-9; Page 10, Paragraph 3).

In regards to claim 13, Wilska discloses a rotatable display subhousing (see Figures 7-9; Page 10, Paragraph 3).

In regards to claim 14, Wilska discloses a display subhousing that translates relative to the handheld housing (see Figures 7-9; Page 10, Paragraph 3).

In regards to claim 15, Wilska discloses a display that both rotates and moves translationally (see Figures 7-9; Page 10, Paragraph 3).

In regards to claim 16, Wilska does not expressly disclose the array of pixel electrodes has a diagonal of 0.25 inches. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made, for the purposes of manufacturing an easy to read display while keeping the display small and portable, to vary the diagonal distance to provide properties such as a compact display diagonal of 0.25 inches, and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

In regards to claim 17, this claim is rejected by the reasoning applied in the above rejection of claim 1; furthermore, Wilska discloses a docking system [Fig. 3; 17] for a portable handheld wireless telephone [Fig. 3; 17], the portable wireless telephone [Fig. 3; 17] including a microphone [Fig. 1; 20], a speaker [Fig. 1; 19], and transceiver [Fig. 1; 18] circuitry with an external communication interface [Fig. 3; 16] within a telephone housing [Fig. 3; 17], the docking system comprising: a housing [Fig. 2; 1] having a plurality of control elements [Fig. 2;

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10, 11] and a display circuit [Fig. 3; 6], the housing including a connector interface [Fig. 3; 8] that couples with an external communication interface [Fig. 3; 16] of a handheld wireless telephone [Fig. 3; 17] (see Page 4, Paragraph 3 and Page 5, Paragraph 3), a display subhousing module [Fig. 2; 9] movable from a storage position to an operating position relative to the housing (see Figures 7-9) and a liquid crystal display [Fig. 1; 9] (see Page 4, Paragraph 2) and a battery [Fig. 3; 3] (see Figure 3). Wilska does not expressly disclose an active matrix LCD, an LED light source, a magnifying image lens, or a power management circuit.

However, Takahara discloses an active matrix liquid crystal display (see Column 33, Lines 22-28), an LED light source [Fig. 21, 211] (see Column 30, Lines 1-18) positioned in a display subhousing [Fig. 21, 201] to illuminate the image [Fig. 21, 214] and a lens [Fig. 21, 216] in the display subhousing that is positioned to receive the image presented on the LCD (see Column 28, Lines 30-49), and a power management circuit [Fig. 22, 223] that controls the power consumption of a display circuit [Fig. 22, the combined circuitry of 211, 214 & 221-225 and the 'variable resistor'], wherein after the image is illuminated, the power management circuit lowers the power consumption of the display circuit until new display data [Fig. 22, 'Video Signal'] is ready to be presented on the liquid crystal display, the power management circuit arranged for receiving control signals [i.e. pulse width variable signals from the 'variable resistor'] for lowering the power consumption, the control signals resulting from signals from the display circuit (see Column 31, Lines 16-63).

Thus, it would have been obvious to a person of ordinary skill in the art, at the time of the invention, to utilize Takahara's active matrix LCD, LED light source, magnifying lens assembly, and power management circuit with Wilska's communication device, so as to provide a high

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quality, energy efficient liquid crystal image that's easy to see (and read) in both dark and bright light.

In regards to claim 18, Wilska does not expressly disclose a backlight. However, Takahara discloses a backlight [Fig. 21, 211] (see Column 28, Lines 30-49 and Column 30, Lines 1-18). Thus, it would have been obvious to a person of ordinary skill in the art, at the time of the invention, to utilize Takahara's backlight with Wilska's LCD, so as to provide a display that's easy to see (and read) in the dark.

In regards to claim 19, Wilska does not expressly disclose a side illumination device. However, Takahara discloses a side illumination device [Fig. 21, 211] (see Column 28, Lines 30-49 and Column 30, Lines 1-18). Thus, it would have been obvious to a person of ordinary skill in the art, at the time of the invention, to utilize Takahara's side illumination device with Wilska's LCD, so as to provide a display that's easy to see (and read) in the dark.

In regards to claim 20, this claim is rejected under the reasoning applied in the above rejection of claim 8.

In regards to claim 21, Wilska does not expressly disclose drawing less than 0.2 watts. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made, for the purpose of drawing very little power, to lower the consumed wattage

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to provide properties such as a draw of less than 0.2 watts, and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

In regards to claim 22, this claim is rejected by the reasoning applied in the above rejection of claim 1; furthermore, Wilska discloses a method of displaying an image on a docking system in conjunction with a portable handheld wireless telephone, the portable wireless telephone [Fig. 3; 17] including a microphone [Fig. 1; 20], a speaker [Fig. 1; 19], and transceiver [Fig. 1; 18] circuitry with an external communication interface [Fig. 3; 16] within a telephone housing [Fig. 3; 17], the method comprising: coupling an external communication interface [Fig. 3; 16] of a wireless telephone [Fig. 3; 17] with a connection interface [Fig. 3; 8] of a docking station [Fig. 2; 1] such that a display circuit [Fig. 3; 6] in the docking station receives image data from transceiver circuitry [Figs. 2 & 3; 17 & 18] of the wireless telephone capable of receiving audio and image data; and operating the display circuit connected to the transceiver circuitry and a matrix display to display an image on the display using the image data (see Page 5, Paragraph 3). Wilska does not expressly disclose an active matrix LCD, or a power management circuit.

However, Takahara discloses an active matrix LCD for generating display data from image data and presenting the display data as an image on the display (see Column 33, Lines 22-28), and a power management circuit [Fig. 22, 223] that controls the power consumption of a display circuit [Fig. 22, the combined circuitry of 211, 214 & 221-225 and the 'variable resistor'], wherein after the image is illuminated, the power management circuit lowers the power consumption of the display circuit until new display data [Fig. 22, 'Video Signal'] is ready to be presented on the liquid crystal display, the power management circuit arranged for receiving

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control signals [i.e. pulse width variable signals from the 'variable resistor'] for lowering the power consumption, the control signals resulting from signals from the display circuit (see Column 31, Lines 16-63).

Thus, it would have been obvious to a person of ordinary skill in the art, at the time of the invention, to utilize Takahara's active matrix LCD and power management circuit with Wilska's display device, so as to provide a high quality, energy efficient display image.

In regards to claim 23, Wilska discloses a battery [Fig. 3; 3].

In regards to claim 24, Wilska discloses coupling a camera [Figs. 2 & 3; 15, 16] (see Page 4, Paragraph 5).

In regards to claim 25, Wilska discloses selecting to view the camera image on the display, or transmitting the image to a remote location (see Figures 1-3; Page 5, Paragraph 1).

In regards to claim 27, Wilska discloses an array of at least 75,000 pixel electrodes (see Page 4, Paragraph 2). Wilska does not expressly disclose the LCD having an active area of less than 100mm^2 . However, Wilska's does disclose variable LCD dimensions (see Page 4, Paragraph 2). In the event that it is shown that the reference does not disclose the claimed active area size with sufficient specificity, it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the active area size to provide properties such as a smaller display area (such as 100mm^2 for instance) so as to conserve overall system size and

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weight, and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

In regards to claim 28, Wilska does not expressly disclose an array of at least 300,000 pixel electrodes. However, Wilska does disclose providing a resolution greater than 640 x 200 pixels² (see Page 4, Paragraph 2). In the event that it is shown that the reference does not disclose the claimed pixel range with sufficient specificity, it would have been obvious to one having ordinary skill in the art at the time the invention was made to vary the number of pixels to provide properties such as a precise display image resolution of at least 300,000 pixel electrodes, and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

In regards to claim 29, this claim is rejected by the reasoning applied in the above rejection of claim 1.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Response to Arguments

5. Applicants' arguments submitted in the 'Amendment' (filed on 19 June 2006) have been fully considered but they are not persuasive. The applicants contend the cited prior art of Takahara et al (US 5,436,635 A),

"modulates the anode voltage to the light emitting tube 211 with a pulse signal, which cycles at 60 Hz to lower the power consumption of the light emitting tube 211, and where the pulse width is varied by manually rotating a variable resistor on the camera (Col. 31, lines 38-40). By varying the pulse width, the quantity of emitted light can be varied proportionately. Using a 50% pulse width, the power consumption of the light emitting tube is said to be reduced to 0.25 W. Adding in the power consumption of the LCD (0.1 W) brings the power to slightly greater than 0.3 W. (Col. 31, l. 62.) Accordingly, Claims 1-25 and 27-29, as amended, are not obvious in view of Wilska and Takahara, since neither reference, alone or in combination, teaches or suggests a 'power management circuit arranged for receiving control signals for lowering the power consumption, the control signals resulting from signals from the display circuit' as recited in independent claims 1, 7, 17, 22, and 29" (see Page 10 of the 'Amendment After Final Rejection Under 37 C.F.R. § 1.116' filed on 1 March 2006).

However, the examiner respectfully disagrees. The examiner respectfully submits that the instant application broadly describes the *display circuit* as merely having "image data transmitted to the display circuit" and "generating display data presented on the liquid crystal

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display" (see claim 1, lines 8-13). Moreover, a circuit is commonly defined as a closed path capable of being followed by an electric current -- or in other words, a configuration of electrically connected devices. As clearly indicated by Takahara's Figure 22, the light source [211], display device [214], sensor [221], battery [222], power supply circuit [223], display device drive circuit [224], reproduction circuit [225], and variable resistor (which is not illustrated) have all been configured as a group of electrically connected devices forming a closed electrical path. Each above listed device is not electrically isolated from the others. On the contrary, each device [211, 214 & 221-225] is electrically connected with the others, so as to form a single combined and cohesive display circuit -- receiving image data (i.e. the "video signal") and generating display data based on that same image data (see Column 31, Lines 16-63).

In this manner, as Takahara teaches reducing the power consumption of the light source (which the applicants themselves also freely admit on page 10, paragraph 3 of the 'Amendment' filed 19 June 2006), so too Takahara inherently discloses power consumption reduction of the overall combined display circuit.

The applicants take the position that Takahara's implementation of a user adjustable variable resistor to alter pulse width signals controlling the quantity of light emitted from the display's backlight precludes teaching a "power management circuit arranged for receiving control signals for lowering the power consumption, the control signals resulting from signals from the display circuit." However, the examiner respectfully disagrees. Takahara clearly does disclose a power management circuit [Fig. 22, 223] arranged for receiving control signals [i.e.

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pulse width variable signals from the 'variable resistor'] for lowering the power consumption, the control signals resulting from signals from a display circuit [Fig. 22, the combined circuitry of 211, 214 & 221-225 and the 'variable resistor'] (see Column 31, Lines 16-63). If the applicants continue to feel their invention reduces power consumption differently than Takahara's device, the applicants are respectfully encouraged to incorporate such distinctive subject matter into the pending claim language.

By such reasoning, rejection of the claims is deemed proper, necessary, and thereby maintained at this time.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Piziali whose telephone number is (571) 272-7678. The examiner can normally be reached on Monday - Friday (6:30AM - 3PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (571) 272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jeff Piziali
31 August 2006